

WHAT IS CLAIMED IS:

1. A pattern inspecting method, comprising:
 - preparing a sample having a first and a second inspection regions and an imaging device having a plurality of pixels;
 - scanning the first inspection region to a first direction using the imaging device to obtain a first measurement pattern representing at least parts of the first inspection region;
 - scanning the second inspection region to the first direction using the imaging device to obtain a second measurement pattern representing at least parts of the second inspection region;
 - comparing the first measurement pattern and the second measurement pattern with each other to determine presence or absence of a defect formed on the sample; and
 - controlling a scanning condition for scanning a pattern of the second inspection region by the imaging device so as to keep the same with the scanning condition when the pattern of the first inspection region is scanned by the imaging device.
2. The method of claim 1, wherein the scanning condition is a positional relationship of pixels of the imaging device and the pattern of the first or second inspection region.
3. The method of claim 1, wherein the pattern is

an edge of the first or second inspection region.

4. The method of claim 1, wherein the pixels of the imaging device is arranged in a line which is orthogonal to the first direction.

5 5. The method of claim 1, wherein the first measurement pattern contains a plurality of first image portions in the first inspection region, and the second measurement pattern contains a plurality of second image portions in the second inspection region.

10 6. The method of claim 1, further comprising:

generating reference pattern data corresponding to the measurement pattern data from design data used when a pattern is formed on the sample; and

15 comparing the first and second measurement pattern data and the reference pattern data with each other to determine presence or absence of a defect of the pattern formed on the sample.

7. The method of claim 3, further comprising:

20 storing a positional relationship of pixels of the imaging device and the edge of the first inspection region when the edge of the first inspection region is scanned.

25 8. The method of claim 7, wherein the step of storing stores a positional difference between the edge of the first inspection region and the pixel of the imaging device as the positional relationship.

9. A pattern inspecting apparatus comprising:

an emitting unit configure to emit to a sample having a first inspection region on which a first pattern is formed and a second inspection region on which a second pattern is formed;

5 an imaging device that have detecting unit that detect images from the samples;

a position recognizing unit configure to recognize a position of the sample with respect to the detecting unit;

10 a signal output unit configure to output a signal to output a relative signal according to a relative movement between the sample and the detecting unit; and

a control unit configure to control a scanning condition for scanning a pattern of the second inspection region by the imaging device so as to keep the same with the scanning condition when the pattern of the first inspection region is scanned by the imaging device.

10. The pattern inspecting apparatus of claim 9, 20 wherein the pixels of the detecting unit is arranged in a line and in a direction orthogonal to the scanning direction.

11. The pattern inspecting apparatus of claim 9, 25 wherein the emitting unit configure to emit one of a light beam and an electron beam.

12. The pattern inspecting apparatus of claim 9, wherein the detecting unit including pixels that detect

images from the samples; one of reflection light, transmission light and a secondary electron.

13. The pattern inspecting apparatus of claim 9, further comprising:

5 a storing unit configure to store a positional relationship of pixels of the detecting unit and an image from the samples.

14. The pattern inspecting apparatus of claim 9, further comprising:

10 a reference data generating unit configure to generate reference pattern data corresponding to the measurement pattern data from design data used when a pattern is formed on the sample; and

15 a die-to-data determination unit configure to compare an image obtained from the first and second inspection regions and the reference pattern data with each other to determine presence or absence of a defect of the pattern formed on the sample.

16. The pattern inspecting apparatus of claim 9, wherein the signal output unit outputs the relative signal on a predetermined timing while the detecting unit detects one of the reflection light, the transmission light and the secondary electron from the first and second inspection regions.

25 16. The pattern inspecting apparatus of claim 13, wherein the signal output unit output the relative signals every given time.

17. The pattern inspecting apparatus of claim 13, wherein the signal output unit outputs the relative signal whenever the sample moves by a predetermined distance relatively with respect to the detecting unit.